



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,306	02/19/2004	Wen Li	2002B107E	7637

23455 7590 06/08/2005

EXXONMOBIL CHEMICAL COMPANY
5200 BAYWAY DRIVE
P.O. BOX 2149
BAYTOWN, TX 77522-2149

EXAMINER

RAJGURU, UMAKANT K

ART UNIT	PAPER NUMBER
----------	--------------

1711

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/782,306

Applicant(s)

LI ET AL.

Examiner

Umakant K. Rajguru

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-120 is/are pending in the application.
- 4a) Of the above claim(s) 66-70, 73, 75-112, 114, 115 and 119 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-65, 71, 72, 74, 113 and 116-118 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-65, 71, 72, 113 and 116-118, drawn to a fiber, classified in class 442, subclass 319.
 - II. Claims 66-70, 73, 75, 76, 114 and 115, drawn to an article, classified in class 2, subclass 114.
 - III. Claims 77-112 and 120, drawn to non-woven article, classified in class 2, subclass 102.
 - IV. Claim 119, drawn to a diaper, classified in class 604, subclass 385.

The inventions are distinct, each from the other because:

Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as for wrapping around an article for fastening and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Art Unit: ~~4761~~ 1711

Inventions I and III are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as for wrapping around an article for fastening and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Inventions I and IV are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as for wrapping around an article for fastening and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the

Art Unit: ~~4764~~ 1711

examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Inventions II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different functions.

Inventions II and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different functions.

Inventions III and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different functions.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

2. During a telephone conversation with Attorney Catherine L. Bell on November 23, 2004 a provisional election was made with traverse to prosecute the invention of I,

Art Unit: ~~4761~~ 1711

claims 1-65, 71, 72, 74, 113 and 116-118. Affirmation of this election must be made by applicant in replying to this Office action. Claims 66-70, 73, 75, 76, 112, 114, 115, 119 and 120 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

4. Claims 116-118 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims depend from claim 113 and encompass an article; but there is no article in claim 113.

5. Claim 19 is objected to because of the following informalities: word "where" is missing after "18". Appropriate correction is required.

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-65, 71, 72, 74, 113 and 116-118 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howard et al (U.S. 5,230,843) in view of Edman (U.S. 3,439,088), Kowalik et al (U.S. 6,197,285) or Coppersmith et al (U.S. 3,818,105).

Howard describes a process for forming fibers and filaments from polyolefins (abstract). Fibers are formed by extruding a mixture consisting essentially of polyolefin, filler and plasticizer (column 1, lines 63-68). Hydrocarbon materials such as petroleum hydrocarbon oils are most preferred as plasticizers (column 3, lines 58-68). Amounts of these ingredients are set forth in column 4, lines 61-68.

Howard is silent about whether the plasticizers (or is not) non-functional.

Edman discloses cosmetic compositions using particular hydrocarbon solvents. Such a solvent is an isoparaffinic solvent (column 1, lines 29-32; 54-72).

Kowalik discloses use of isoparaffin extenders for clear gel cosmetic compounds. In Table 1 (column 5), few isoparaffins are listed. They read on those in instant specification Table 1, page 13.

Art Unit: ~~1761~~ 1711

Coppersmith discloses a composition, which contains C₁₂-C₁₄ isoparaffinic hydrocarbon fractions as effective lubricants.

It would therefore have been obvious to use, in the composition of fiber of Howard, the specific isoparaffinic hydrocarbons of any of the secondary references (in lieu of or in addition to those already present) in order to facilitate smooth flow and controlled evaporation of solvent from the fiber. It is true that the secondary references are not related to fiber. Nonetheless one essential requirement in the preparation of fiber from a composition is that the composition must be made into a moldable state.

MR One way to achieve this requirement is to admix enough ~~and~~ ^{and} the proper plasticizer with the polymeric matrix. To this extent, the secondary references offer enough teaching as well as motivation to add the plasticizers (of the secondary references) to the composition of primary reference.

8. Claims 1-65, 71, 72, 74, 113 and 116-118 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wisneki et al (U.S. 4,663,220).

Wisneki et al teaches a composition comprised of 60-wt % of Kraton G1652 and 40 wt % Indopol LI4 plasticizer (Table XIII). Kraton G1652 is a polyolefin comprised of an SE/BS (styrene-ethylene/butylene-styrene) block copolymer (column 41, lines 5-38), and Indopol LI4 is a polybutene having a pour point of -51 °C (Table XI). Other relevant data from Table XI include: average molecular weight of 320, specific gravity of 0.8373, density of 6.97 lb/gal (0.835 g/cm³). An average molecular weight of 320 would correspond to approximately 6 units derived from butene, and accordingly, about 24 carbon atoms; that is, the polybutene is characterized as a C₂₄paraffin. The end use of

Art Unit: ~~1764~~ 1711

the product of the invention is a fibrous non-woven web (i.e. non-woven fabric; see abstract).

The composition of the present claims and that of the prior art are essentially the same. Wisneski et al is silent with respect to the properties recited in dependent claims; however, one having ordinary skill in the art would have found it obvious that the materials described therein will exhibit the same properties. Since the PTO does not conduct experiments, the burden is shifted to the Applicants to establish an unobviousness difference. *In re Fitzgerald*, 619 F.2d. 67, 205 USPQ 594 (CCPA 1980). See MPEP § 2112-2112.02.

It would have been obvious to follow teachings of patentee and arrive at instant invention.

9. Claims 1-65, 71, 72, 74, 113 and 116-118 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio (U.S. 6,001,455).

Nishio discloses a composition comprised of 100 pw of a polyolefin and 32 wt % of a paraffin oil having an average molecular weight of 746 ($746 \div 14$ corresponds approximately to C_{50}) and containing no cyclic components, commercially available as Diana Process Oil PW-380 (see Table 1, Example 2 and glossary of components, column 11-13). Diana Process Oil PW-380 exhibits a pour point of $-15^{\circ}C$, a viscosity of 30.10 cSt ($100^{\circ}C$) and, specific gravity of 0.8769.

The polyolefin is comprised of 36 wt % of polypropylene homopolymer, 36 wt % of a propylene-ethylene copolymer rubber having a propylene content of 70 wt %, and includes 28 wt % of an EPDM rubber. The combination of 36 wt % of polypropylene

Art Unit: ~~1761~~ (171)

homopolymer and 36 wt % of propylene-ethylene copolymer corresponds to a composition comprising 50 wt % of propylene homopolymer and 50 wt % of propylene ~~copolymer~~ copolymer, which contains 30 wt % comonomer. ~~None of this satisfies the~~ The EPDM rubber is thermoplastic and elastomeric due to the diene component. As such, the material qualifies as a plastomer. Inventive compositions were extruded as sheets (column 14, line 53).

A reasonable basis exist to believe that the plasticized composition described in the prior art will exhibit the claimed properties, especially in light of the fact that composition of the prior art is essentially the same as the composition of the present claims. As such, it would have been obvious to one having ordinary skill in the art that the composition described in the prior art also exhibits the claimed properties. Since the PTO cannot perform experiments, the burden is shifted to the Applicants to establish an unobviousness difference. *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977) *In re Spada*, 911 F.2d 705, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Nishio does not disclose the structure of the paraffins contained in the oil. Since the oil disclosed in Nishio et al contains paraffins having a carbon content within range set forth in the claims, it would have been obvious to one having ordinary skill in the art that the paraffin oil disclosed in Nishio also contains n-paraffins (straight paraffin hydrocarbons and isoparaffins (branched paraffin hydrocarbons) within the claimed ranges.

The patentee does not disclose the properties recited in dependent claims. Nonetheless, it would have been obvious to one having ordinary skill in the art that the

Art Unit: ~~1761~~ 1711

materials of Nishio et al will exhibit the same properties, especially in light of the fact that the composition of the prior art and that of the present claims are essentially the same.

10. Claims 1-65, 71, 72, 74, 113 and 116-118 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maehara et al (U.S. 4,703,078).

Maehara discloses a polyolefin-based resin composition comprised of 100 parts by wt (pw) of a polyolefin-based resin selected from ethylene and/or propylene (co)polymers, 20-300 pw of a wax, and 20-300 pw of an oily fluid having a pour point at or below 25⁰ C (claim 1). Representative oils are paraffinic oils such as Diana PW-380 process oil (pour point of -15⁰ C, viscosity of 30.10 cSt (100⁰ C), specific gravity of 0.8769) and Idemitsu Polybutene 15R (pour point of -15⁰ C, viscosity of 38 cSt (100⁰ C), specific gravity of 0.870, M_w = 570; see column 6, lines 44-47 and 56-60).

It would have been obvious to follow teachings of this patentee and arrive at claimed invention.

11. Any inquiry concerning this communication from the examiner should be directed to U.K. Rajguru whose telephone number is (571) 272-1077. The examiner can generally be reached on Monday-Friday 9:30 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application is assigned is 703-872-9306.

Art Unit: 1761 17 11

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



U.K. Rajguru/dh
May 24, 2005



James J. Seidle
Supervisory Patent Examiner
Technology Center 1700